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CONTEXT CONTROLLER HAVING INSTRUCTION-BASED TIME SLICE
TASK SWITCHING CAPABILITY AND PROCESSOR EMPLOYING THE SAME

ABSTRACT OF THE DISCLOSURE

A context controller for managing multitasking in a processor
and a method of operating the same. In one embodiment, the context
controller includes: (1) a time slice instruction counter that
counts a number of instructions executed with respect to a given
background task and (2) a background task controller that cyclicly
executes a context corresponding to another background task when
the number of instructions executed equals a dynamically-
programmable time slice value.